

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A method of filtering phonetic units to be used within a concatenative text-to-speech voice, comprising the steps of:

receiving into a filtering system at least one phonetic unit that has been automatically extracted from a speech corpus in order to construct a concatenative text-to-speech voice;

calculating an abnormality index for said phonetic unit, wherein said abnormality index indicates a likelihood of said phonetic unit being misaligned;

comparing said abnormality index to a normality threshold;

if said abnormality index does not exceed said normality threshold, marking said phonetic unit as a verified phonetic unit; and,

building said concatenative text-to-speech voice using said verified phonetic units.

2. (Original) The method of claim 1, further comprising the step of:

if said abnormality index exceeds said normality threshold, marking said phonetic unit as a suspect phonetic unit.

3. (Original) The method of claim 2, further comprising the step of presenting said suspect phonetic unit within an alignment validation interface, wherein said alignment validation interface comprises a validation means for validating said suspect phonetic unit and a denial means for invalidating said suspect phonetic unit.

4. (Original) The method of claim 3, wherein said at least one phonetic unit comprises a plurality of phonetic units, said method further comprising the steps of:

providing at least one navigation control within said alignment validation interface; and,

upon a selection of one of said navigation controls, navigating from said suspect phonetic unit to a different suspect phonetic unit.

5. (Original) The method of claim 3, further comprising the steps of:

providing an audio playback control within said alignment validation interface; and,

upon a selection of said audio playback control, audibly presenting said suspect phonetic unit.

6. (Original) The method of claim 3, further comprising the step of:

if said validation means is selected within said alignment validation interface, marking said suspect phonetic unit as a verified phonetic unit.

7. (Original) The method of claim 3, further comprising the steps of:

if said denial means is selected within said alignment validation interface, marking said suspect phonetic unit as a rejected phonetic unit; and,

excluding said rejected phonetic units from said building of said concatenative text-to-speech voice.

8. (Original) The method of claim 1, wherein said at least one phonetic unit comprises a plurality of phonetic units, said method further comprising the steps of:

presenting a graphical distribution of the abnormality indexes of said plurality of phonetic units within a normality threshold interface; and,

adjusting said normality threshold with said normality threshold interface.

9. (Original) The method of claim 1, said calculating step further comprising the steps of:

examining said phonetic unit for a plurality of abnormality attributes;
assigning an abnormality value for each of said abnormality attribute; and,
calculating said abnormality index based at least in part upon said plurality of abnormality values.

10. (Original) The method of claim 9, said calculating step further comprising the steps of:

for each abnormality attribute, identifying an abnormality weight and multiplying said abnormality weight and said abnormality value; and,
adding results from said multiplying to determine said abnormality index.

11. (Original) The method of claim 9, said assigning step further comprising the steps of:

examining said phonetic unit for at least one abnormality attribute characteristic;
for each abnormality attribute characteristic, determining at least one abnormality parameter;

utilizing said abnormality parameters within an abnormality attribute evaluation function; and,

calculating said abnormality index using said abnormality attribute evaluation function.

12. (Currently Amended) A system of filtering phonetic units to be used within a concatenative text-to-speech voice, comprising the steps of:

means for receiving at least one phonetic unit that has been automatically extracted from a speech corpus in order to construct a concatenative text-to-speech voice;

means for calculating an abnormality index for said phonetic unit, wherein said abnormality index indicates a likelihood of said phonetic unit being misaligned;

means for comparing said abnormality index to a normality threshold;

~~if said abnormality index does not exceed said normality threshold,~~ means for marking said phonetic unit as a verified phonetic unit when said abnormality index does not exceed said normality threshold; and,

means for building said concatenative text-to-speech voice using said verified phonetic units.

13. (Currently Amended) A ~~machine-readable~~ computer-readable storage medium having stored thereon, a computer program having a plurality of code sections, said code sections executable by a ~~machine~~ computer for causing the ~~machine~~ computer to perform the steps of:

receiving into the computer at least one phonetic unit that has been automatically extracted from a speech corpus in order to construct a concatenative text-to-speech voice;

calculating an abnormality index for said phonetic unit, wherein said abnormality index indicates a likelihood of said phonetic unit being misaligned;

comparing said abnormality index to a normality threshold;

if said abnormality index does not exceed said normality threshold, marking said phonetic unit as a verified phonetic unit; and,

building said concatenative text-to-speech voice using said verified phonetic units.

14. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 13, wherein the computer further comprising performs the step of:

if said abnormality index exceeds said normality threshold, marking said phonetic unit as a suspect phonetic unit.

15. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 14, wherein the computer further comprising performs the step of presenting said suspect phonetic unit within an alignment validation interface, wherein said alignment validation interface comprises a validation means for validating said suspect phonetic unit and a denial means for invalidating said suspect phonetic unit.

16. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 15, wherein said at least one phonetic unit comprises a plurality of phonetic units, ~~said method~~ the machine further comprising performing the steps of:

providing at least one navigation control within said alignment validation interface; and,

upon a selection of one of said navigation controls, navigating from said suspect phonetic unit to a different suspect phonetic unit.

17. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 15, wherein the computer further comprising performs the steps of:

providing an audio playback control within said alignment validation interface; and,

upon a selection of said audio playback control, audibly presenting said suspect phonetic unit.

18. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 15, wherein the computer further comprising performs the step of:

if said validation means is selected within said alignment validation interface, marking said suspect phonetic unit as a verified phonetic unit.

19. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 15, wherein the computer further comprising performs the steps of:

if said denial means is selected within said alignment validation interface, marking said suspect phonetic unit as a rejected phonetic unit; and,

excluding said rejected phonetic units from said building of said concatenative text-to-speech voice.

20. (Currently Amended) The ~~machine-readable~~ computer-readable storage medium of claim 13, wherein said at least one phonetic unit comprises a plurality of phonetic units, ~~said method further comprising~~ wherein the computer further performs the steps of:

presenting a graphical distribution of the abnormality indexes of said plurality of phonetic units within a normality threshold interface; and,

adjusting said normality threshold with said normality threshold interface.

21. (Currently Amended) The machine-readable storage medium of claim 13, wherein said calculating step further ~~comprising~~ comprises the steps of:

examining said phonetic unit for a plurality of abnormality attributes;

assigning an abnormality value for each of said abnormality attribute; and,

calculating said abnormality index based at least in part upon said plurality of abnormality values.

22. (Currently Amended) The machine-readable storage medium of claim 21, wherein said calculating step further ~~comprising~~ comprises the steps of:

for each abnormality attribute, identifying an abnormality weight and multiplying said abnormality weight and said abnormality value; and,
adding results from said multiplying to determine said abnormality index.

23. (Currently Amended) The machine-readable storage medium of claim 21, wherein said assigning step further ~~comprising~~ comprises the steps of:

examining said phonetic unit for at least one abnormality attribute characteristic;
for each abnormality attribute characteristic, determining at least one abnormality parameter;
utilizing said abnormality parameters within an abnormality attribute evaluation function; and,
calculating said abnormality index using said abnormality attribute evaluation function.